## Message

From: Kay, Robert [rtkay@usgs.gov]
Sent: 9/11/2013 8:05:29 PM

**To**: Nordine, John [nordine.john@epa.gov]

Subject: Techalloy

John--comments on the 8-2013 monthly report from the Techalloy site.

**General Question.** When is the report summarizing site conditions and data collected to date (or at least prior to the June 2013 sampling) going to be provided? Given that we have the results of at least most of the June 2013 sampling, and the summary report apparently hasn't been completed yet, it may be desirable for Techalloy to include the June 2013 sampling results, and discussion of this data, in this summary document--if it doesn't further delay submission to EPA.

Monthly Report, Progress Made--According to the attachment for the 8/31/13DMR report water was analyzed for pH, 1,1,1-TCA, <u>TCA</u>, and <u>PCA</u>. The analyses should have been for pH, 1,1,1-TCA, <u>TCE</u> and <u>PCE</u>. It's probably just typos, but Techalloy needs to figure out what's going on here and USEPA should probably be provided with copies of the actual analyses delivered from the lab for verification of what analyses were performed.

Mr. Ruopp also may wish to be informed of any difficulties he may encounter by having signed off on this DMR report. Although this is almost certainly a minor error, Techalloy submitted paperwork certifying the results an analysis that was probably was not performed.

As near as I can tell there is no discussion of the data from well DGW-1D, only a mention of MCL exceedence. Data from this well, especially the June 2013 detection of vinyl chloride, should be discussed.

Monthly report, Summary of Validated Data and Results--The text in this section states the sampling results will be presented in the August monthly progress report. This is the August monthly progress report and the results of the sampling from the monitoring wells are presented in this document. Update the text.

Picky point, according to the title the discussion of the sampling results presented in the previous section should have been presented in this section.

Where is the discussion of the results of the residential well sampling? Some mention of the residential wells sampled and the results (presumably they'll all be non-detects) is appropriate.

The text in this section should be deleted and substituted with the discussion of the sampling results for both the monitoring wells and the residential supply wells.

**Plot of water level and precipitation**. The graph is in pretty good shape, but could be improved if the precipitation data was presented on a secondary y-axis. Putting precipitation and pumping totals at the bottom of the file with no clear relation to dates and water levels is not informative.

Minor points, 1. Adding a location to the title (Techalloy site) would be useful. 2. Technically the title should be altered--this data does not include part of August and stretches into September. 3. The label for the x-axis should be "Date" or something like it, "August 2013" is inaccurate and redundant. 4. Don't need hours "0:00" in the labels for the tick marks on the x-axis. The date is good enough and adding hours just clutters the figure.

**Precipitation Data NOAA Marengo 8-2013**. Contrary to the file name, this data is only for part of September. It's useless for deciphering effects on water levels in most of August. Techalloy should either omit this file entirely or (preferably) present the NOAA data for the period during which the water levels were plotted (ideally Aug. 1 through Sept. 3).

**MW-2-6-13.** Where's the data from the June sampling? File and plots end with data for March 2013. Should March 2013 be June 2013?

I believe this was mentioned in an earlier review, but some (most?) of the concentrations presented on the graph and in the table don't seem to agree. The TCA concentration in June 95 is given as 510 ppb in the table. The graph puts it at more like 570 ppb. For April 02 the table puts TCA concentration at 59 ppb. The graph puts it at more than 100 ppb. There are lots of other apparent errors with the early TCA and probably at least some of the TCE.

I'm not sure if these apparent errors are related to the method of plotting or some other software issue because when I click on the actual data points in the graph the values agree with what's in the table, but the data points don't agree with the scale for some reason. Furthermore, it seems like only some of the analytes are reported incorrectly, and only for some of the sampling period.

These plots (or tables) need to be corrected.

**MW-4-6-2013.** Minor issue, but the utility of the graph would be improved by adding the site name to the title.

x-axis ends at March 2013. Presumably it should be June 2013.

MW-5-6-2013. Again, data ends at March 2013. Presumably it should end at be June 2013.

Adding the June 1995 data to the graph should be considered. I understand it will skew the y axis, but it would provide a complete depiction of the data.

Unbold the 2007 concentrations of DCE. These concentrations do not exceed the MCL.

MW-5D-13. No comments.

**MW-6-6-2013**. In figure caption "2012" should be "2013".

MW-7-6-2013. Why is the MCL at the end of the plot? It due to the scale and it's presentation as a dot at the end of the plot it doesn't really provide any information. Techalloy should consider deleting it.

**MW-8-6-13**. x axis ends at December 2012. It needs to be extended to June 2013, as does the date on the figure caption.

PCE concentrations on the graph do not agree with those in the table for most, maybe all, of the reporting period. At least some of the TCE values also seem to plot incorrectly.

Again, the graphs need to be fixed.

**MW-9-6-13**. There's a stray "e" on the label for the y axis. Also, the graph should indicate the analyses are for PCE--not "series 1".

MW-HBR-6--13. No comments.

**DGW-1D-6-13**. Unbold the DCA and TCE data in the table for June 2013.

DGW-1I-6-13. No comments.